

Notice of Allowability

Application No.

09/609,961

Applicant(s)

MILLER, STEPHEN S.

Examiner

Ronald D. Hartman Jr.

Art Unit

2121

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment filed on 3/8/2006.
2. ☒ The allowed claim(s) is/are 1-17 and 19-40 (renumbered as 1-39, respectively).
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☒ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☒ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date 20060523.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date <u>3/8/2006</u> | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

DETAILED ACTION

Allowable Subject Matter

1. Claims 1-17 and 19-40 are allowed over the prior art of record.

As per claims 1-17 and 19-40, the prior art of record fails to teach an apparatus for controlling an electronic device, the apparatus comprising a plurality of finger shaped sleeves which are worn on the fingers of a hand, wherein at least one sleeve has a microphone and wherein at least one sleeve has a contact sensitive element, wherein the electronic device is controlled using a combination of:

- finger movements which are interpreted, in light of the specification, to be the result of actuating, pressing or activating the contact sensitive element on the sleeve using the same hand on which the sleeve is worn; AND
- voice commands which are interpreted, in light of the specification, to be the result of speaking into the microphone embedded in one of the sleeves, in combination with the other claimed features and or limitations as claimed.

The closest available prior art appears to be issued to Gray, U.S. Patent No. 5,987,310. This Patent teaches a cellular telephone that is to be worn on the hand of a user. This system does not teach the combination of finger movements and voice commands to be performed, as interpreted above, by the hand that is wearing the glove-like phone, for controlling another electronic device. This would be very difficult, if not impossible since the contact sensitive elements are located on the palm of the glove and the user would have to flex his fingers in a very unorthodox manner in order to effectuate the functions associated with the contact sensitive elements.

The next closest prior art appears to be issued to Kramer et al., U.S. Patent No. 5,442,729. This Patent teaches a glove-like mechanism for communicating with a remote device, wherein the mechanism has a microphone and speaker embedded on the arm portion of the glove (See Figure 3C). This system does not teach the

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aforementioned features of a microphone embedded in one of the finger shaped sleeves.

Two other systems that are very similar to the claimed invention are U.S. Patent Application Publication No. 2005/0009584 and U.S. Patent Application Publication No. 2005/0233707, both showing a wearable phone to be worn on the hand of the user and both having effective filing dates after the filing date of the instant invention and therefore represent art not applicable as prior art.

The next closest available art appears to be issued to Harmon, U.S. Patent No. 6,141,643. This Patent discloses a data input glove having contact sensitive elements on the finger sleeves of the glove and also discusses the utilization of a microphone. However, as the Applicant has attested, Harmon does not teach the microphone located on one of the finger shaped sleeves, rather is simply used in conjunction with the glove-like device. The applicant is correct in asserting that Harmon does not specifically disclose any location details with respect to the microphone. The only mention of the microphone is in claims 7 and 23 in which is disclosed that the glove also comprises a microphone, to be used in conjunction with the processor of the glove-like device, for translating input speech into symbols for display on the display unit.

Examiner Comment

2. The drawings are objected to because they are informal in nature. New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because they are informal in nature and are difficult to understand. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

Conclusion

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ronald D. Hartman Jr. whose telephone number is (571) 272-3684. The examiner can normally be reached on Mon.-Fri., 11:00 - 8:30 pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Knight can be reached on (571) 272-3687. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ronald D Hartman Jr.
Patent Examiner
Art Unit 2121

May 23, 2006

RDH

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Anthony Knight
Supervisory Patent Examiner
Group 3600